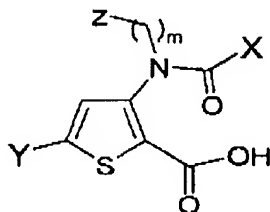


This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A compound of formula:



or pharmaceutically acceptable salts thereof;

wherein;

Z is 3-7 membered heterocycle or 3-7 membered cycloalkyl;

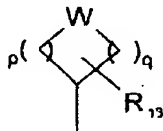
Y is 6-10 membered aryl;

X is 3-10 membered cycloalkyl;

m is an integer from 0-1;

provided that when Y is unsubstituted phenyl then X is other than 4-methylcyclohexane.

2. (Original) A compound according to claim 1, wherein Z is



wherein;

W is CR₁₀R₁₁, S(O)_n, O or NR₁₂;

wherein, n is 0-2;

R₁₀ and R₁₁ are each independently chosen from H, C₁₋₆ alkyl, C₆₋₁₀ aryl, C₃₋₁₀ heterocycle, C₃₋₁₀ heteroaralkyl, C₆₋₁₀ aralkyl, C(O)-C₁₋₆ alkyl, C₁₋₆ alkyloxy, hydroxyl or formyl; or R₁₀ and R₁₁ are taken together to form =O, =S or =N-Ra, wherein Ra is H, hydroxyl or C₁₋₆ alkyl; R₁₂ is H, C₁₋₆ alkyl, C₆₋₁₄ aryl, C₃₋₁₂ heterocycle, C₃₋₁₂ heteroaralkyl, C₆₋₁₆ aralkyl, C(O)-C₁₋₆ alkyl or C₁₋₆ alkyloxy;

P is an integer from 1-3;

q is an integer from 0-2;

R₁₃ is one or more optional substituent each of which is independently chosen from halogen, nitro, nitroso, SO₂Rf, SO₂Rf, PO₃RcRd, CONRgRh, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₆₋₁₂ aralkyl, C₆₋₁₂ aryl, C₁₋₆ alkyloxy, C₂₋₆ alkenyloxy, C₂₋₆ alkynyloxy, C₆₋₁₂ aryloxy, C(O)C₁₋₆ alkyl, C(O)C₂₋₆ alkenyl, C(O)C₂₋₆ alkynyl, C(O)C₆₋₁₂ aryl, C(O)C₆₋₁₂ aralkyl, C₃₋₁₀ heterocycle, hydroxyl, NRgRh, C(O)ORf, cyano, azido, amidino or guanido;

wherein Rf, Rc, Rd, Rg and Rh in each case is H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₆₋₁₀ aryl, C₃₋₁₀ heterocycle, C₃₋₁₀ heteroaralkyl or C₆₋₁₀ aralkyl;

or Rc and Rd are taken together with the oxygens to form a 5 to 10 membered heterocycle;

or Rg and Rh are taken together with the nitrogen to form a 3 to 10 membered heterocycle.

3. (Original) A compound according to claim 1, wherein Z is 6-7 membered heterocycle or 6-7 membered cycloalkyl.

4. (Original) A compound according to claim 1, wherein Z is cyclohexyl, piperidinyl, N-(C₁₋₆ alkyl)-piperidinyl, hexahydrothiopyranyl, azepanyl, methylazepanyl, N-(C₁₋₆ alkyl)-piperidinylmethyl, tetrahydropyranyl, piperidinylmethyl, pyridinyl, pyridinylmethyl, tetrahydrothiopyranyl, dioxolanylmethyl or dioxanylmethyl which in each case is unsubstituted or substituted by one or more substituent chosen from halogen, nitro, nitroso, SO₂Rf, SO₂Rf, PO₃RcRd, CONRgRh, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₆₋₁₂ aralkyl, C₆₋₁₂ aryl, C₁₋₆ alkyloxy, C₂₋₆ alkenyloxy, C₂₋₆ alkynyloxy, C₆₋₁₂ aryloxy, C(O)C₁₋₆ alkyl, C(O)C₂₋₆ alkenyl, C(O)C₂₋₆ alkynyl, C(O)C₆₋₁₂ aryl, C(O)C₆₋₁₂ aralkyl, C(O)NHRf, C₃₋₁₀ heterocycle, hydroxyl, NRGh, C(O)ORf, cyano, azido, amidino or guanido; wherein Rf, Rc, Rd, Rg and Rh in each case is H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₆₋₁₀ aryl, C₃₋₁₀ heterocycle, C₃₋₁₀ heteroaralkyl or C₆₋₁₀ aralkyl; or Rc and Rd are taken together with the oxygens to form a 5 to 10 membered heterocycle; or Rg and Rh are taken together with the nitrogen to form a 3 to 10 membered heterocycle.
5. (Original) A compound according to claim 1, wherein Z is cyclohexyl unsubstituted or substituted by one or more substituent chosen from halogen, SO₂Rf, CONRgRh, C₁₋₆ alkyl, C₆₋₁₂ aralkyl, C₆₋₁₂ aryl, C₁₋₆ alkyloxy, C(O)C₁₋₆ alkyl, C₃₋₁₀ heterocycle, hydroxyl, NRGh, C(O)Orf or cyano; wherein Rf, Rg and Rh in each case is H or C₁₋₆ alkyl.
6. (Original) A compound according to claim 1, wherein Z is piperidinyl unsubstituted or substituted by one or more substituent chosen from halogen, SO₂Rf, CONRgRh, C₁₋₆ alkyl,

C₆₋₁₂ aralkyl, C₆₋₁₂ aryl, C₁₋₆ alkyloxy, C(O)C₁₋₆ alkyl, C(O)NHRf, C₃₋₁₀ heterocycle, hydroxyl, NRgRh, C(O)Orf or cyano;

wherein Rf, Rg and Rh in each case is H or C₁₋₆ alkyl.

7. (Original) A compound according to claim 1, wherein Z is N-(C₁₋₆ alkyl)-piperidinyl unsubstituted or substituted by one or more substituent chosen from halogen, SO₂Rf, CONRgRh, C₁₋₆ alkyl, C₆₋₁₂ aralkyl, C₆₋₁₂ aryl, C₁₋₆ alkyloxy, C(O)C₁₋₆ alkyl, C(O)NHRf, C₃₋₁₀ heterocycle, hydroxyl, NRgRh, C(O)Orf or cyano;
wherein Rf, Rg and Rh in each case is H or C₁₋₆ alkyl.
8. (Original) A compound according to claim 4, wherein Z is cyclohexyl, piperidinyl or N-C₁₋₆ alkyl-piperidinyl.
9. (Original) A compound according to claim 1, wherein X is 6-membered cycloalkyl.
10. (Original) A compound according to claim 1, wherein X is cyclohexyl unsubstituted or substituted by one or more substituent chosen from halogen, nitro, nitroso, SO₂Rf, SO₂Rf, PO₃RcRd, CONRgRh, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₆₋₁₂ aralkyl, C₆₋₁₂ aryl, C₁₋₆ alkyloxy, C₂₋₆ alkenyloxy, C₂₋₆ alkynyloxy, C₆₋₁₂ aryloxy, C(O)C₁₋₆ alkyl, C(O)C₂₋₆ alkenyl, C(O)C₂₋₆ alkynyl, C(O)C₆₋₁₂ aryl, C(O)C₆₋₁₂ aralkyl, C(O)NHRf, C₃₋₁₀ heterocycle, hydroxyl, NRgRh, C(O)ORf, cyano, azido, amidino or guanido;
wherein Rf, Rc, Rd, Rg and Rh in each case is H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₆₋₁₀ aryl, C₃₋₁₀ heterocycle, C₃₋₁₀ heteroaralkyl or C₆₋₁₀ aralkyl;
or Rc and Rd are taken together with the oxygens to form a

- 5 to 10 membered heterocycle;
or Rg and Rh are taken together with the nitrogen to form a
3 to 10 membered heterocycle.
11. (Original) A compound according to claim 1, wherein X is cyclohexyl substituted by one or more substituent chosen from C₁₋₆ alkyl, halogen, C₂₋₆ alkenyl, C₂₋₆ alkynyl or C₁₋₆ alkyloxy.
12. (Original) A compound according to claim 1, wherein X is 4-methyl-cyclohexyl or 2-hydroxy-4-methyl-cyclohexyl.
13. (Original) A compound according to claim 1, wherein Y is phenyl unsubstituted or substituted by one or more substituent chosen from halogen, nitro, nitroso, SO₃Rf, SO₂Rf, PO₃RcRd, CONRgRh, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₆₋₁₂ aralkyl, C₆₋₁₂ aryl, C₁₋₆ alkyloxy, C₂₋₆ alkenyloxy, C₂₋₆ alkynyloxy, C₆₋₁₂ aryloxy, C(O)C₁₋₆ alkyl, C(O)C₂₋₆ alkenyl, C(O)C₂₋₆ alkynyl, C(O)C₆₋₁₂ aryl, C(O)C₆₋₁₂ aralkyl, C(O)NHRf, C₃₋₁₀ heterocycle, hydroxyl, NRgRh, C(O)ORf, cyano, azido, amidino or guanido;
wherein Rf, Rc, Rd, Rg and Rh in each case is H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₆₋₁₀ aryl, C₃₋₁₀ heterocycle, C₃₋₁₀ heteroaralkyl or C₆₋₁₀ aralkyl;
or Rc and Rd are taken together with the oxygens to form a 5 to 10 membered heterocycle;
or Rg and Rh are taken together with the nitrogen to form a 3 to 10 membered heterocycle.
14. (Original) A compound according to claim 1, wherein Y is phenyl substituted by one or more substituent chosen from

halogen, nitro, SO_2Rf , C_{1-6} alkyl, C_{1-6} alkyloxy, $\text{C}(\text{O})\text{C}_{1-6}$ alkyl, $\text{C}(\text{O})\text{Orf}$, cyano or azido.

15. (Original) A compound according to claim 1, wherein Y is phenyl.
16. (Original) A compound according to claim 2, wherein P is 2 and q is 2.
17. (Original) A compound according to claim 2, wherein p is 3 and q is 2.
18. (Original) A compound according to claim 2, wherein W is $\text{CR}_{10}\text{R}_{11}$ or NR_{12} ; wherein R_{10} , R_{11} and R_{12} are as defined in claim 2.
19. (Original) A compound according to claim 2, wherein R_{10} is C_{1-3} alkyl, C_{6-10} aralkyl, $\text{C}(\text{O})\text{-C}_{1-3}$ alkyl, C_{1-3} alkyloxy, hydroxyl or formyl; and R_{11} is H.
20. (Original) A compound according to claim 2, wherein R_{13} is one or more optional substituent each of which is independently chosen from halogen, nitro, SO_2CH_3 , CONH_2 , CONHCH_3 , $\text{CONH}(\text{CH}_3)_2$, methyl, ethyl, propyl, isopropyl, benzyl, phenyl, acetyl, methoxy, ethoxy, propyloxy, isopropyloxy, piperidinyl, piperazinyl, pyrrolidinyl, azetidinyl, aziridinyl, pyridinyl, , dioxanyl, dioxolanyl, azepanyl, hydroxyl, NH_2 , $\text{N}(\text{H})\text{CH}_3$, $\text{NH}(\text{CH}_3)_2$, cyano or azido; wherein Rf , Rg and Rh are as defined in claim 2.
21. (Original) A compound according to claim 1, wherein:

Z is cyclohexyl unsubstituted or substituted by one or more substituent independently chosen from halogen, SO₂Rf, CONRgRh, C₁₋₆ alkyl, C₆₋₁₂ aralkyl, C₆₋₁₂ aryl, C₁₋₆ alkyloxy, C(O)C₁₋₆ alkyl, C₃₋₁₀ heterocycle, hydroxyl, NRgRh, C(O)OR_f or cyano;

wherein Rf, Rg and Rh in each case is H or C₁₋₆ alkyl;

Y is phenyl unsubstituted or substituted by one or more substituent independently chosen from halogen, nitro, SO₂Rf, CONRgRh, C₁₋₆ alkyl, C₆₋₁₂ aralkyl, C₆₋₁₂ aryl, C₁₋₆ alkyloxy, C₆₋₁₂ aryloxy, C(O)C₁₋₆ alkyl, C(O)C₆₋₁₂ aryl, C(O)C₆₋₁₂ aralkyl, C(O)NHR_f, C₃₋₁₀ heterocycle, hydroxyl, NRgRh, C(O)OR_f, cyano, amidino or guanido;

wherein Rf, Rg and Rh in each case is H, C₁₋₆ alkyl, C₆₋₁₀ aryl, C₃₋₁₀ heterocycle, C₃₋₁₀ heteroaralkyl or C₆₋₁₀ aralkyl;

X is cyclohexyl unsubstituted or substituted by one or more substituent independently chosen from halogen, SO₂Rf, CONRgRh, C₁₋₆ alkyl, C₆₋₁₂ aralkyl, C₆₋₁₂ aryl, C₁₋₆ alkyloxy, C₆₋₁₂ aryloxy, C(O)C₁₋₆ alkyl, C(O)C₆₋₁₂ aryl, C(O)C₆₋₁₂ aralkyl, C(O)NHR_f, C₃₋₁₀ heterocycle, hydroxyl, NRgRh, C(O)OR_f, cyano or azido;

wherein Rf, Rc, Rd, Rg and Rh in each case is H, C₁₋₆ alkyl, C₆₋₁₀ aryl, C₃₋₁₀ heterocycle, C₃₋₁₀ heteroaralkyl or C₆₋₁₀ aralkyl;

m is 0;

provided that when Y is unsubstituted phenyl then X is other than 4-methylcyclohexane.

22. (Original) A compound chosen from:

3 - { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -METHYL} -PIPERIDINIUM;
TRIFLUORO-ACETATE;
2 - { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -METHYL} -PIPERIDINIUM;
TRIFLUORO-ACETATE;
3 - [(4-METHYL-CYCLOHEXANECARBONYL) -PYRIDIN-3-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(4-METHYL-CYCLOHEXANECARBONYL) -PYRIDIN-4-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
5 - (3-FLUORO-PHENYL) -3 - [ISOPROPYL - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;
3 - [AZEPAN-4-YL - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(2,4-DICHLORO-BENZOYL) - [1,3]DIOXOLAN-2-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [[1,3]DIOXOLAN-2-YLMETHYL - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(1-FLUORO-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(1-FLUORO-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
4 - [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM CHLORIDE;
3 - [(2-ACETYLAMINO-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (4-OXO-CYCLOHEXYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(4-METHYL-CYCLOHEXANECARBONYL) -PYRIDIN-2-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-HYDROXYIMINO-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (4-METHYL-CYCLOHEX-3-ENECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1-AZIDOMETHYL-2-METHYL-BUTYL) - (2,4-DICHLORO-BENZOYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

2 - [(2-Carboxy-5-phenyl-thiophen-3-yl) - (2-chloro-benzoyl) - amino] - 3-methyl-pentyl-ammonium trifluoroacetate;

3 - [(1-AMINOMETHYL-2-METHYL-BUTYL) - (2,4-DICHLORO-BENZOYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

{2 - [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (2,4-DICHLORO-BENZOYL) - AMINO] - PROPYL} - TRIMETHYL-AMMONIUM; TRIFLUORO-ACETATE;

3 - [ISOPROPYL - (5-METHYL - [1,3] DIOXANE-2-CARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

4 - [(2-CARBOXY-5 - (4-FLUORO-PHENYL) - THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 1-METHYL-PIPERIDINIUM CHLORIDE;

5 - (4-FLUORO-PHENYL) - 3 - [(2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) - ISOPROPYL-AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHOXYIMINO-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (4-FLUORO-PHENYL) - 3 - [ISOPROPYL - (4-METHYL-CYCLOHEX-1-ENECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (5-METHYL-TETRAHYDRO-PYRAN-2-CARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (4-METHYLENE-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (5-METHYL-TETRAHYDRO-PYRAN-2-CARBONYL) -AMINO] -
5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [ISOPROPYL - (5-METHYL-3,6-DIHYDRO-2H-PYRAN-2-CARBONYL) -
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) - (TETRAHYDRO-
PYRAN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(2-AZIDO-1-METHYL-ETHYL) - (4-METHYL-CYCLOHEXANECARBONYL) -
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (1-METHYL-PIPERIDIN-4-
YLMETHYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (TETRAHYDRO-THIOPYRAN-4-
YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-
CYCLOHEXANECARBONYL) -AMINO] -METHYL} -1-METHYL-PIPERIDINIUM
CHLORIDE;
3 - [(2-AMINO-1-METHYL-ETHYL) - (4-METHYL-CYCLOHEXANECARBONYL) -
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (1-OXO-HEXAHYDRO-
THIOPYRAN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC
ACID;
4 - { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-
CYCLOHEXANECARBONYL) -AMINO] -METHYL} -1-METHYL-PIPERIDINIUM
CHLORIDE;
3 - [(1-ETHYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(1-ISOPROPYL-PIPERIDIN-4-YL) - (4-METHYL-
CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC
ACID;
3 - [(4-METHYL-CYCLOHEXANECARBONYL) -PIPERIDIN-4-YL-AMINO] -5-
PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1 - (4-METHOXY-BENZYL) -2-OXO-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(2-AZIDO-1-METHYL-ETHYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (3-FLUORO-PHENYL) -3 - [(2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-AMINO] -THIOPHENE-2-CARBOXYLIC ACID;

4 - [(2-CARBOXY-5-#P: -TOLYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM CHLORIDE;

3 - [(4-METHOXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (4-METHYL-CYCLOHEXYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1-ACETYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

4 - [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-AZEPANIUM CHLORIDE;

5 - (4-FLUORO-PHENYL) -3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;

5 - (3-FLUORO-PHENYL) -3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1-BENZYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (4-FLUORO-PHENYL) -3 - [ISOPROPYL - (4-METHYL-CYCLOHEX-3-ENECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;

4 - [(2-CARBOXY-5 - (3-FLUORO-PHENYL) -THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM; CHLORIDE;

4- [[2-CARBOXY-5- (4-METHOXY-PHENYL) -THIOPHEN-3-YL] - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM; CHLORIDE;

4- [[2-CARBOXY-5- (4-NITRO-PHENYL) -THIOPHEN-3-YL] - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM; CHLORIDE;

4- [[2-CARBOXY-5- (4-CHLORO-PHENYL) -THIOPHEN-3-YL] - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM CHLORIDE;

4- [[2-CARBOXY-5- (4-CYANO-PHENYL) -THIOPHEN-3-YL] - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM CHLORIDE;

5- (4-CHLORO-PHENYL) -3- [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;

3- [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5- (4-METHOXY-PHENYL) -THIOPHENE-2-CARBOXYLIC ACID;

5- (4-CYANO-PHENYL) -3- [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;

3- [(2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-AMINO] -5- (4-METHOXY-PHENYL) -THIOPHENE-2-CARBOXYLIC ACID;

3- [(1-FORMYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3- [N', N'-Dimethyl-N-(4-methyl-cyclohexanecarbonyl)-hydrazino] -5-phenyl-thiophene-2-carboxylic acid;

3- [(4-METHYL-CYCLOHEXANECARBONYL) - (1-METHYL-1-OXY-PIPERIDIN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3- [(4-METHYL-CYCLOHEXANECARBONYL) - (1-METHYL-1-OXY-PIPERIDIN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3- [(2-AMINO-CYCLOHEXYL) - (2,4-DICHLORO-BENZOYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (1-OXO-HEXAHYDRO-THIOPYRAN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
5 - (4-FLUOROPHENYL) - ((4-METHYL-CYCLOHEXANECARBONYL) -1-(METHYL-PIPERIDIN-3-YLMETHYL) -AMINO) -THIOPHENE-2-CARBOXYLIC ACID;
3 - [(1-METHANESULFONYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(1-METHYLCARBAMOYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [N-(2,4-Dichloro-benzoyl) -N',N'-dimethyl-hydrazino] -5-phenyl-thiophene-2-carboxylic acid;
or pharmaceutically acceptable salts thereof.

23. (Original) A compound chosen from: 5-(4-FLUORO-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;
3 - [(1-METHYLCARBAMOYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (1-METHYL-2-OXO-PIPERIDIN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(4-CARBOXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(1-CYANO-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(4-CARBOXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (3,4-DIFLUORO-PHENYL) - 3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

5' - ACETYL-4 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - [2,2'] BITHIOPHENYL-5-CARBOXYLIC ACID;

3 - [(1-CARBAMOYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (7-OXO-AZEPAN-4-YL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1-AMINOXYALYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ETHYL- (4-METHYL-BENZOYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (4-ACETYL-PHENYL) - 3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-HYDROXY-4-METHYL-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(3-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

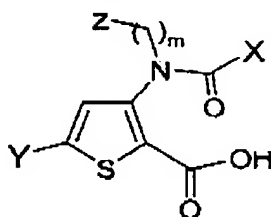
3 - [(4-HYDROXY-4-METHYL-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(3-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(3-HYDROXY-CYCLOPENTYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

or pharmaceutically acceptable salts thereof.

24. (Currently Amended) A compound as defined in ~~anyone of claims 1 to 23~~ Claim 1, wherein said pharmaceutically acceptable salt is sodium salt.
25. (Original) A method for treating or preventing a Flaviviridae viral infection in a host comprising administering to the host a therapeutically effective amount of at least one compound having the formula:



or pharmaceutically acceptable salts thereof;
wherein;

Z is 3-7 membered heterocycle or 3-7 membered cycloalkyl;

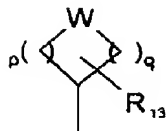
Y is 6-10 membered aryl;

X is 3-10 membered cycloalkyl;

m is an integer from 0-1;

provided that when Y is unsubstituted phenyl then X is other than 4-methylcyclohexane.

26. (Original) A method according to claim 25, wherein said pharmaceutically acceptable salts is sodium salt.
27. (Original) A method according to claim 25, wherein Z is



wherein;

W is CR₁₀R₁₁, S(O)_n, O or NR₁₂;

wherein, n is 0-2;

R₁₀ and R₁₁ are each independently chosen from H, C₁₋₆ alkyl, C₆₋₁₀ aryl, C₃₋₁₀ heterocycle, C₃₋₁₀ heteroaralkyl, C₆₋₁₀ aralkyl, C(O)-C₁₋₆ alkyl, C₁₋₆ alkyloxy, hydroxyl or formyl; or R₁₀ and R₁₁ are taken together to form =O, =S or -N-Ra, wherein Ra is H, hydroxyl or C₁₋₆ alkyl;

R₁₂ is H, C₁₋₆ alkyl, C₆₋₁₄ aryl, C₃₋₁₂ heterocycle, C₃₋₁₂ heteroaralkyl, C₆₋₁₆ aralkyl, C(O)-C₁₋₆ alkyl or C₁₋₆ alkyloxy;

p is an integer from 1-3;

q is an integer from 0-2;

R₁₃ is one or more optional substituent each of which is independently chosen from halogen, nitro, nitroso, SO₂Rf, SO₂Rf, PO₃RcRd, CONRgRh, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₆₋₁₂ aralkyl, C₆₋₁₂ aryl, C₁₋₆ alkyloxy, C₂₋₆ alkenyloxy, C₂₋₆ alkynyloxy, C₆₋₁₂ aryloxy, C(O)C₁₋₆ alkyl, C(O)C₂₋₆ alkenyl, C(O)C₂₋₆ alkynyl, C(O)C₆₋₁₂ aryl, C(O)C₆₋₁₂ aralkyl, C₃₋₁₀ heterocycle, hydroxyl, NRgRh, C(O)ORf, cyano, azido, amidino or guanido;

wherein Rf, Rc, Rd, Rg and Rh in each case is H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₆₋₁₀ aryl, C₃₋₁₀ heterocycle, C₃₋₁₀ heteroaralkyl or C₆₋₁₀ aralkyl;

or Rc and Rd are taken together with the oxygens to form a 5 to 10 membered heterocycle;

or Rg and Rh are taken together with the nitrogen to form a 3 to 10 membered heterocycle.

28. (Original) A method according to claim 25, wherein Z is 6-7 membered heterocycle or 6-7 membered cycloalkyl.
29. (Original) A method according to claim 25, wherein Z is cyclohexyl, piperidinyl, N-(C₁₋₆ alkyl)-piperidinyl, hexahydrothiopyranyl, azepanyl, methylazepanyl, N-(C₁₋₆ alkyl)-piperidinylmethyl, tetrahydropyranyl, piperidinylmethyl, pyridinyl, pyridinylmethyl, tetrahydrothiopyranyl, dioxolanylmethyl or dioxanylmethyl which in each case is unsubstituted or substituted by one or more substituent chosen from halogen, nitro, nitroso, SO₃Rf, SO₂Rf, PO₃RcRd, CONRgRh, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₆₋₁₂ aralkyl, C₆₋₁₂ aryl, C₁₋₆ alkyloxy, C₂₋₆ alkenyloxy, C₂₋₆ alkynyloxy, C₆₋₁₂ aryloxy, C(O)C₁₋₆ alkyl, C(O)C₂₋₆ alkenyl, C(O)C₂₋₆ alkynyl, C(O)C₆₋₁₂ aryl, C(O)C₆₋₁₂ aralkyl, C(O)NHRf, C₃₋₁₀ heterocycle, hydroxyl, NRgRh, C(O)ORf, cyano, azido, amidino or guanido; wherein Rf, Rc, Rd, Rg and Rh in each case is H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₆₋₁₀ aryl, C₃₋₁₀ heterocycle, C₃₋₁₀ heteroaralkyl or C₆₋₁₀ aralkyl; or Rc and Rd are taken together with the oxygens to form a 5 to 10 membered heterocycle; or Rg and Rh are taken together with the nitrogen to form a 3 to 10 membered heterocycle.
30. (Original) A method according to claim 25, wherein X is 6-membered cycloalkyl.

31. (Original) A method according to claim 25, wherein X is cyclohexyl unsubstituted or substituted by one or more substituent chosen from halogen, nitro, nitroso, SO₃Rf, SO₂Rf, PO₃RcRd, CONRgRh, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₆₋₁₂ aralkyl, C₆₋₁₂ aryl, C₁₋₆ alkyloxy, C₂₋₆ alkenyloxy, C₂₋₆ alkynyloxy, C₆₋₁₂ aryloxy, C(O)C₁₋₆ alkyl, C(O)C₂₋₆ alkenyl, C(O)C₂₋₆ alkynyl, C(O)C₆₋₁₂ aryl, C(O)C₆₋₁₂ aralkyl, C(O)NHRf, C₃₋₁₀ heterocycle, hydroxyl, NRgRh, C(O)ORf, cyano, azido, amidino or guanido; wherein Rf, Rc, Rd, Rg and Rh in each case is H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₆₋₁₀ aryl, C₃₋₁₀ heterocycle, C₃₋₁₀ heteroaralkyl or C₆₋₁₀ aralkyl; or Rc and Rd are taken together with the oxygens to form a 5 to 10 membered heterocycle; or Rg and Rh are taken together with the nitrogen to form a 3 to 10 membered heterocycle.
32. (Original) A method according to claim 25, wherein X is cyclohexyl substituted by one or more substituent chosen from C₁₋₆ alkyl, halogen, C₂₋₆ alkenyl, C₂₋₆ alkynyl or C₁₋₆ alkyloxy.
33. (Original) A method according to claim 25, wherein X is 4-methyl-cyclohexyl or 2-hydroxy-4-methyl-cyclohexyl.
34. (Original) A method according to claim 25, wherein Y is phenyl unsubstituted or substituted by one or more substituent chosen from halogen, nitro, nitroso, SO₃Rf, SO₂Rf, PO₃RcRd, CONRgRh, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₆₋₁₂ aralkyl, C₆₋₁₂ aryl, C₁₋₆ alkyloxy, C₂₋₆ alkenyloxy, C₂₋₆ alkynyloxy, C₆₋₁₂ aryloxy, C(O)C₁₋₆ alkyl, C(O)C₂₋₆ alkenyl, C(O)C₂₋₆ alkynyl, C(O)C₆₋₁₂ aryl, C(O)C₆₋₁₂

aralkyl, C(O)NHRf, C₃₋₁₀ heterocycle, hydroxyl, NRgRh, C(O)ORf, cyano, azido, amidino or guanido; wherein Rf, Rc, Rd, Rg and Rh in each case is H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₆₋₁₀ aryl, C₃₋₁₀ heterocycle, C₃₋₁₀ heteroaralkyl or C₆₋₁₀ aralkyl; or Rc and Rd are taken together with the oxygens to form a 5 to 10 membered heterocycle; or Rg and Rh are taken together with the nitrogen to form a 3 to 10 membered heterocycle.

35. (Currently Amended) A method according to ~~anyone of claims 25 or 34~~ Claim 1, wherein said Flaviviridae viral infection is HCV.
36. (Original) A method for treating or preventing a Flaviviridae viral infection in a host comprising administering to the host a therapeutically effective amount of at least one compound chosen from:
- 3- { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -METHYL} -PIPERIDINIUM; TRIFLUORO-ACETATE;
- 2- { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -METHYL} -PIPERIDINIUM; TRIFLUORO-ACETATE;
- 3- [(4-METHYL-CYCLOHEXANECARBONYL) -PYRIDIN-3-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
- 3- [(4-METHYL-CYCLOHEXANECARBONYL) -PYRIDIN-4-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
- 5- (3-FLUORO-PHENYL) -3- [ISOPROPYL- (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;
- 3- [AZEPAN-4-YL- (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(2,4-DICHLORO-BENZOYL) - (1,3)DIOXOLAN-2-YLMETHYL-AMINO] -
5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(1,3)DIOXOLAN-2-YLMETHYL- (4-METHYL-CYCLOHEXANECARBONYL) -
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(1-FLUORO-4-METHYL-CYCLOHEXANECARBONYL) - ISOPROPYL-
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(1-FLUORO-4-METHYL-CYCLOHEXANECARBONYL) - ISOPROPYL-
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
4 - [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-
CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM CHLORIDE;
3 - [(2-ACETYLAMINO-4-METHYL-CYCLOHEXANECARBONYL) - ISOPROPYL-
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (4-OXO-CYCLOHEXYL) -
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(4-METHYL-CYCLOHEXANECARBONYL) - PYRIDIN-2-YLMETHYL-
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(4-HYDROXYIMINO-CYCLOHEXYL) - (4-METHYL-
CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC
ACID;
3 - [ISOPROPYL- (4-METHYL-CYCLOHEX-3-ENECARBONYL) -AMINO] -5-
PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(1-AZIDOMETHYL-2-METHYL-BUTYL) - (2,4-DICHLORO-BENZOYL) -
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
2 - [(2-Carboxy-5-phenyl-thiophen-3-yl) - (2-chloro-benzoyl) -
amino] -3-methyl-pentyl-ammonium trifluoroacetate;
3 - [(1-AMINOMETHYL-2-METHYL-BUTYL) - (2,4-DICHLORO-BENZOYL) -
AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
{2 - [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (2,4-DICHLORO-
BENZOYL) -AMINO] -PROPYL} -TRIMETHYL-AMMONIUM; TRIFLUORO-
ACETATE;

3 - [ISOPROPYL - (5-METHYL - [1,3] DIOXANE-2-CARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

4 - [[2-CARBOXY-5 - (4-FLUORO-PHENYL) -THIOPHEN-3-YL] - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM CHLORIDE;

5 - (4-FLUORO-PHENYL) -3 - [(2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-AMINO] -THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHOXYIMINO-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (4-FLUORO-PHENYL) -3 - [ISOPROPYL - (4-METHYL-CYCLOHEX-1-ENECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (5-METHYL-TETRAHYDRO-PYRAN-2-CARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (4-METHYLENE-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (5-METHYL-TETRAHYDRO-PYRAN-2-CARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (5-METHYL-3,6-DIHYDRO-2H-PYRAN-2-CARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) - (TETRAHYDRO-PYRAN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(2-AZIDO-1-METHYL-ETHYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (1-METHYL-PIPERIDIN-4-YLMETHYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (TETRAHYDRO-THIOPYRAN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -METHYL} -1-METHYL-PIPERIDINIUM CHLORIDE;

3 - [(2-AMINO-1-METHYL-ETHYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (1-OXO-HEXAHYDRO-THIOPYRAN-4-YL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

4 - { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - METHYL } - 1-METHYL-PIPERIDINIUM CHLORIDE;

3 - [(1-ETHYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1-ISOPROPYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) - PIPERIDIN-4-YL-AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [1 - (4-METHOXY-BENZYL) - 2-OXO-PIPERIDIN-4-YL] - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(2-AZIDO-1-METHYL-ETHYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (3-FLUORO-PHENYL) - 3 - [(2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) - ISOPROPYL-AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

4 - [(2-CARBOXY-5-P-TOLYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 1-METHYL-PIPERIDINIUM CHLORIDE;

3 - [(4-METHOXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (4-METHYL-CYCLOHEXYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1-ACETYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

4 - [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-AZEPANUM CHLORIDE;
5 - (4-FLUORO-PHENYL) -3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;
5 - (3-FLUORO-PHENYL) -3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;
3 - [(1-BENZYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
5 - (4-FLUORO-PHENYL) -3 - [ISOPROPYL - (4-METHYL-CYCLOHEX-3-ENECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;
4 - [(2-CARBOXY-5 - (3-FLUORO-PHENYL) -THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM;
CHLORIDE;
4 - [(2-CARBOXY-5 - (4-METHOXY-PHENYL) -THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM;
CHLORIDE;
4 - [(2-CARBOXY-5 - (4-NITRO-PHENYL) -THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM;
CHLORIDE;
4 - [(2-CARBOXY-5 - (4-CHLORO-PHENYL) -THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM CHLORIDE;
4 - [(2-CARBOXY-5 - (4-CYANO-PHENYL) -THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM CHLORIDE;
5 - (4-CHLORO-PHENYL) -3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;
3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5 - (4-METHOXY-PHENYL) -THIOPHENE-2-CARBOXYLIC ACID;
5 - (4-CYANO-PHENYL) -3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;
3 - [(2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) - ISOPROPYL-AMINO] -5 - (4-METHOXY-PHENYL) -THIOPHENE-2-CARBOXYLIC ACID;

3- [(1-FORMYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3- [N',N'-Dimethyl-N-(4-methyl-cyclohexanecarbonyl)-hydrazino] -5-phenyl-thiophene-2-carboxylic acid;

3- [(4-METHYL-CYCLOHEXANECARBONYL) - (1-METHYL-1-OXY-PIPERIDIN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3- [(4-METHYL-CYCLOHEXANECARBONYL) - (1-METHYL-1-OXY-PIPERIDIN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3- [(2-AMINO-CYCLOHEXYL) - (2,4-DICHLORO-BENZOYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3- [(4-METHYL-CYCLOHEXANECARBONYL) - (1-OXO-HEXAHYDRO-THIOPYRAN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5- (4-FLUOROPHENYL) - ((4-METHYL-CYCLOHEXANECARBONYL) -1-(METHYL-PIPERIDIN-3-YLMETHYL) -AMINO) -THIOPHENE-2-CARBOXYLIC ACID;

3- [(1-METHANESULFONYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3- [(1-METHYLCARBAMOYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3- [N-(2,4-Dichloro-benzoyl)-N',N'-dimethyl-hydrazino] -5-phenyl-thiophene-2-carboxylic acid;
or pharmaceutically acceptable salts thereof.

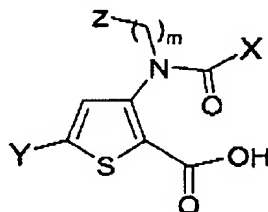
37. (Original) A method for treating or preventing a Flaviviridae viral infection in a host comprising administering to the host a therapeutically effective

amount of at least one compound chosen from: 5-(4-FLUORO-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;
3-[(1-METHYLCARBAMOYL-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-2-OXO-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3-[(4-CARBOXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3-[(1-CYANO-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3-[(4-CARBOXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
5-(3,4-DIFLUORO-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;
5'-ACETYL-4-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-[2,2']BITHIOPHENYL-5-CARBOXYLIC ACID;
3-[(1-CARBAMOYL-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3-[(4-METHYL-CYCLOHEXANECARBONYL)-(7-OXO-AZEPAN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3-[(1-AMINOXALYL-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3-[ETHYL-(4-METHYL-BENZOYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (4-ACETYL-PHENYL) - 3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;
3 - [(4-HYDROXY-4-METHYL-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(3-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(4-HYDROXY-4-METHYL-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(3-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(3-HYDROXY-CYCLOPENTYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
or pharmaceutically acceptable salts thereof.

38. (Currently Amended) A method according to ~~anyone of claims 36 or 37~~ Claim 36, wherein said pharmaceutically acceptable salts is sodium salt.
39. (Currently Amended) A method according to ~~anyone of claims 36 or 37~~ Claim 36, wherein said Flaviviridea viral infection is HCV.
40. (Currently Amended) A method according to ~~anyone of claims 25 or 34~~ Claim 36, further comprising administering at least one additional agent chosen from viral serine protease inhibitor, viral polymerase inhibitor, viral helicase inhibitor, immunomodulating agent, antioxydant agent, antibacterial agent, therapeutic vaccine, hepatoprotectant agent or antisense agent.

41. (Currently Amended) A method according to ~~anyone of claims 25 or 34~~ Claim 25, further comprising administering at least one additional agent chosen from interferon α , ribavirin, silybum marianum, interleukine-12, amantadine, ribozyme, thymosin, N-acetyl cysteine or cyclosporin.
42. (Original) A method for inhibiting or reducing the activity of a flaviviridae viral polymerase in a host comprising administering a therapeutically effective amount of at least one compound having the formula:



or pharmaceutically acceptable salts thereof;
wherein;

Z is 3-7 membered heterocycle or 3-7 membered cycloalkyl;

Y is 6-10 membered aryl;

X is 3-10 membered cycloalkyl;

m is an integer from 0-1;

provided that when Y is unsubstituted phenyl then X is other than 4-methylcyclohexane.

43. (Original) A method for inhibiting or reducing the activity of a flaviviridae viral polymerase in a host comprising

administering a therapeutically effective amount of at least one compound chosen from:

3 - { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -METHYL} -PIPERIDINIUM;
TRIFLUORO-ACETATE;
2 - { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -METHYL} -PIPERIDINIUM;
TRIFLUORO-ACETATE;
3 - [(4-METHYL-CYCLOHEXANECARBONYL) -PYRIDIN-3-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(4-METHYL-CYCLOHEXANECARBONYL) -PYRIDIN-4-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
5 - (3-FLUORO-PHENYL) -3 - [ISOPROPYL - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;
3 - [A2EPAN-4-YL - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(2,4-DICHLORO-BENZOYL) - [1,3]DIOXOLAN-2-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [[1,3]DIOXOLAN-2-YLMETHYL - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(1-FLUORO-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(1-FLUORO-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
4 - [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM CHLORIDE;
3 - [(2-ACETYLAMINO-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (4-OXO-CYCLOHEXYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(4-METHYL-CYCLOHEXANECARBONYL) -PYRIDIN-2-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-HYDROXYIMINO-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (4-METHYL-CYCLOHEX-3-ENECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1-AZIDOMETHYL-2-METHYL-BUTYL) - (2,4-DICHLORO-BENZOYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

2 - [(2-Carboxy-5-phenyl-thiophen-3-yl) - (2-chloro-benzoyl) - amino] - 3-methyl-pentyl-ammonium trifluoroacetate;

3 - [(1-AMINOMETHYL-2-METHYL-BUTYL) - (2,4-DICHLORO-BENZOYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

{2 - [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (2,4-DICHLORO-BENZOYL) - AMINO] - PROPYL} - TRIMETHYL-AMMONIUM; TRIFLUORO-ACETATE;

3 - [ISOPROPYL - (5-METHYL - [1,3]DIOXANE-2-CARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

4 - [(2-CARBOXY-5 - (4-FLUORO-PHENYL) - THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 1-METHYL-PIPERIDINIUM CHLORIDE;

5 - (4-FLUORO-PHENYL) - 3 - [(2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) - ISOPROPYL-AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHOXYIMINO-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (4-FLUORO-PHENYL) - 3 - [ISOPROPYL - (4-METHYL-CYCLOHEX-1-ENECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (5-METHYL-TETRAHYDRO-PYRAN-2-CARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (4-METHYLENE-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (5-METHYL-TETRAHYDRO-PYRAN-2-CARBONYL) - AMINO] -
5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [ISOPROPYL - (5-METHYL-3,6-DIHYDRO-2H-PYRAN-2-CARBONYL) -
AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) - (TETRAHYDRO-
PYRAN-4-YL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(2-AZIDO-1-METHYL-ETHYL) - (4-METHYL-CYCLOHEXANECARBONYL) -
AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (1-METHYL-PIPERIDIN-4-
YLMETHYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (TETRAHYDRO-THIOPYRAN-4-
YL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-
CYCLOHEXANECARBONYL) - AMINO] - METHYL } - 1-METHYL-PIPERIDINIUM
CHLORIDE;
3 - [(2-AMINO-1-METHYL-ETHYL) - (4-METHYL-CYCLOHEXANECARBONYL) -
AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (1-OXO-HEXAHYDRO-
THIOPYRAN-4-YL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC
ACID;
4 - { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-
CYCLOHEXANECARBONYL) - AMINO] - METHYL } - 1-METHYL-PIPERIDINIUM
CHLORIDE;
3 - [(1-ETHYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -
AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(1-ISOPROPYL-PIPERIDIN-4-YL) - (4-METHYL-
CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC
ACID;
3 - [(4-METHYL-CYCLOHEXANECARBONYL) - PIPERIDIN-4-YL-AMINO] - 5-
PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [[1 - (4-METHOXY-BENZYL) - 2-OXO-PIPERIDIN-4-YL] - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(2-AZIDO-1-METHYL-ETHYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (3-FLUORO-PHENYL) - 3 - [(2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) - ISOPROPYL-AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

4 - [(2-CARBOXY-5-P-TOLYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 1-METHYL-PIPERIDINIUM CHLORIDE;

3 - [(4-METHOXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (4-METHYL-CYCLOHEXYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1-ACETYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

4 - [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 1-METHYL-AZEPANIUM CHLORIDE;

5 - (4-FLUORO-PHENYL) - 3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

5 - (3-FLUORO-PHENYL) - 3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1-BENZYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (4-FLUORO-PHENYL) - 3 - [ISOPROPYL - (4-METHYL-CYCLOHEX-3-ENECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

4 - [[2-CARBOXY-5 - (3-FLUORO-PHENYL) - THIOPHEN-3-YL] - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 1-METHYL-PIPERIDINIUM CHLORIDE;

4 - [[2-CARBOXY-5-(4-METHOXY-PHENYL)-THIOPHEN-3-YL] - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM; CHLORIDE;

4 - [[2-CARBOXY-5-(4-NITRO-PHENYL)-THIOPHEN-3-YL] - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM; CHLORIDE;

4 - [[2-CARBOXY-5-(4-CHLORO-PHENYL)-THIOPHEN-3-YL] - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM CHLORIDE;

4 - [[2-CARBOXY-5-(4-CYANO-PHENYL)-THIOPHEN-3-YL] - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM CHLORIDE;

5-(4-CHLORO-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;

3-[(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-(4-METHOXY-PHENYL)-THIOPHENE-2-CARBOXYLIC ACID;

5-(4-CYANO-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;

3-[(2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-AMINO] -5-(4-METHOXY-PHENYL)-THIOPHENE-2-CARBOXYLIC ACID;

3-[(1-FORMYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3-[N',N'-Dimethyl-N-(4-methyl-cyclohexanecarbonyl)-hydrazino]-5-phenyl-thiophene-2-carboxylic acid;

3-[(4-METHYL-CYCLOHEXANECARBONYL) - (1-METHYL-1-OXY-PIPERIDIN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3-[(4-METHYL-CYCLOHEXANECARBONYL) - (1-METHYL-1-OXY-PIPERIDIN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3-[(2-AMINO-CYCLOHEXYL) - (2,4-DICHLORO-BENZOYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-CARBOXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (3,4-DIFLUORO-PHENYL) - 3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

5' - ACETYL-4 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - [2,2'] BITHIOPHENYL-5-CARBOXYLIC ACID;

3 - [(1-CARBAMOYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (7-OXO-AZEPAN-4-YL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1-AMINOXALYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ETHYL- (4-METHYL-BENZOYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (4-ACETYL-PHENYL) - 3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-HYDROXY-4-METHYL-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(3-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-HYDROXY-4-METHYL-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(3-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(3-HYDROXY-CYCLOPENTYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-OXO-HEXAHYDRO-THIOPYRAN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5-(4-FLUOROPHENYL)-[(4-METHYL-CYCLOHEXANECARBONYL)-1-(METHYL-PIPERIDIN-3-YLMETHYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;

3-[(1-METHANESULFONYL-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3-[(1-METHYLCARBAMOYL-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3-[N-(2,4-Dichloro-benzoyl)-N',N'-dimethyl-hydrazino]-5-phenyl-thiophene-2-carboxylic acid;
or pharmaceutically acceptable salts thereof.

44. (Original) A method for inhibiting or reducing the activity of a flaviviridae viral polymerase in a host comprising administering a therapeutically effective amount of at least one compound chosen from:

5-(4-FLUORO-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;

3-[(1-METHYLCARBAMOYL-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-2-OXO-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3-[(4-CARBOXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

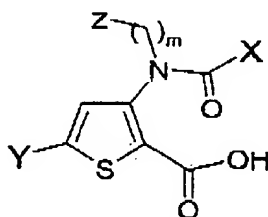
3-[(1-CYANO-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

or pharmaceutically acceptable salts thereof.

45. (Currently Amended) A method as defined in ~~anyone of claims 37 or 38~~ Claim 37, wherein said polymerase is a RNA-dependant RNA-polymerase.

46. (Currently Amended) A method as defined in ~~anyone of claims 37 or 38~~ Claim 37, wherein said polymerase is HCV polymerase.

47. (Original) A pharmaceutical composition comprising at least one compound having the formula:



or pharmaceutically acceptable salts thereof;

wherein;

Z is 3-7 membered heterocycle or 3-7 membered cycloalkyl;

Y is 6-10 membered aryl;

X is 3-10 membered cycloalkyl;

m is an integer from 0-1;

provided that when Y is unsubstituted phenyl then X is other than 4-methylcyclohexane,
and at least one pharmaceutically acceptable carrier or excipient.

48. (Currently Amended) A pharmaceutical composition comprising at least one compound chosen from:

- 3 - { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -METHYL} -PIPERIDINIUM; TRIFLUORO-ACETATE;
- 2 - { [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -METHYL} -PIPERIDINIUM; TRIFLUORO-ACETATE;
- 3 - [(4-METHYL-CYCLOHEXANECARBONYL) -PYRIDIN-3-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
- 3 - [(4-METHYL-CYCLOHEXANECARBONYL) -PYRIDIN-4-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
- 5 - (3-FLUORO-PHENYL) -3- [ISOPROPYL- (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;
- 3 - [AZEPAN-4-YL- (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
- 3 - [(2,4-DICHLORO-BENZOYL) - [1,3]DIOXOLAN-2-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
- 3 - [[1,3]DIOXOLAN-2-YLMETHYL- (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
- 3 - [(1-FLUORO-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
- 3 - [(1-FLUORO-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
- 4 - [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -1-METHYL-PIPERIDINIUM CHLORIDE;
- 3 - [(2-ACETYLAMINO-4-METHYL-CYCLOHEXANECARBONYL) -ISOPROPYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
- 3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (4-OXO-CYCLOHEXYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) - PYRIDIN-2-YLMETHYL-AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(4-HYDROXYIMINO-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [ISOPROPYL- (4-METHYL-CYCLOHEX-3-ENECARBONYL) - AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3 - [(1-AZIDOMETHYL-2-METHYL-BUTYL) - (2,4-DICHLORO-BENZOYL) - AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
2 - [(2-Carboxy-5-phenyl-thiophen-3-yl) - (2-chloro-benzoyl) - amino] -3-methyl-pentyl-ammonium trifluoroacetate;
3 - [(1-AMINOMETHYL-2-METHYL-BUTYL) - (2,4-DICHLORO-BENZOYL) - AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
{2 - [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (2,4-DICHLORO-BENZOYL) - AMINO] - PROPYL} - TRIMETHYL-AMMONIUM; TRIFLUORO-ACETATE;
3 - [ISOPROPYL- (5-METHYL- [1,3] DIOXANE-2-CARBONYL) - AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
4 - [{2-CARBOXY-5- (4-FLUORO-PHENYL) - THIOPHEN-3-YL} - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] -1-METHYL-PIPERIDINIUM CHLORIDE;
5- (4-FLUORO-PHENYL) -3 - [(2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) - ISOPROPYL-AMINO] -THIOPHENE-2-CARBOXYLIC ACID;
3 - [(4-METHOXYIMINO-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
5- (4-FLUORO-PHENYL) -3 - [ISOPROPYL- (4-METHYL-CYCLOHEX-1-ENECARBONYL) - AMINO] -THIOPHENE-2-CARBOXYLIC ACID;
3 - [ISOPROPYL- (5-METHYL-TETRAHYDRO-PYRAN-2-CARBONYL) - AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (4-METHYLENE-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (5-METHYL-TETRAHYDRO-PYRAN-2-CARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ISOPROPYL - (5-METHYL-3,6-DIHYDRO-2H-PYRAN-2-CARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) - (TETRAHYDRO-PYRAN-4-YL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(2-AZIDO-1-METHYL-ETHYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (1-METHYL-PIPERIDIN-4-YLMETHYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (TETRAHYDRO-THIOPYRAN-4-YL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - METHYL} - 1-METHYL-PIPERIDINIUM CHLORIDE;

3 - [(2-AMINO-1-METHYL-ETHYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (1-OXO-HEXAHYDRO-THIOPYRAN-4-YL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

4 - [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - METHYL} - 1-METHYL-PIPERIDINIUM CHLORIDE;

3 - [(1-ETHYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1-ISOPROPYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) - PIPERIDIN-4-YL-AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [[1 - (4-METHOXY-BENZYL) - 2-OXO-PIPERIDIN-4-YL] - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(2-AZIDO-1-METHYL-ETHYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (3-FLUORO-PHENYL) - 3 - [(2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL) - ISOPROPYL-AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

4 - [(2-CARBOXY-5-P-TOLYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 1-METHYL-PIPERIDINIUM CHLORIDE;

3 - [(4-METHOXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (4-METHYL-CYCLOHEXYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1-ACETYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

4 - [(2-CARBOXY-5-PHENYL-THIOPHEN-3-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 1-METHYL-AZEPANIUM CHLORIDE;

5 - (4-FLUORO-PHENYL) - 3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

5 - (3-FLUORO-PHENYL) - 3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1-BENZYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (4-FLUORO-PHENYL) - 3 - [ISOPROPYL - (4-METHYL-CYCLOHEX-3-ENECARBONYL) - AMINO] - THIOPHENE-2-CARBOXYLIC ACID;

4 - [[2-CARBOXY-5 - (3-FLUORO-PHENYL) - THIOPHEN-3-YL] - (4-METHYL-CYCLOHEXANECARBONYL) - AMINO] - 1-METHYL-PIPERIDINIUM; CHLORIDE;

4- [[2-CARBOXY-5-(4-METHOXY-PHENYL)-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM; CHLORIDE;

4- [[2-CARBOXY-5-(4-NITRO-PHENYL)-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM; CHLORIDE;

4- [[2-CARBOXY-5-(4-CHLORO-PHENYL)-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

4- [[2-CARBOXY-5-(4-CYANO-PHENYL)-THIOPHEN-3-YL]-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-1-METHYL-PIPERIDINIUM CHLORIDE;

5-(4-CHLORO-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;

3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-(4-METHOXY-PHENYL)-THIOPHENE-2-CARBOXYLIC ACID;

5-(4-CYANO-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;

3-[(2-HYDROXY-4-METHYL-CYCLOHEXANECARBONYL)-ISOPROPYL-AMINO]-5-(4-METHOXY-PHENYL)-THIOPHENE-2-CARBOXYLIC ACID;

3-[(1-FORMYL-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3-[N',N'-Dimethyl-N-(4-methyl-cyclohexanecarbonyl)-hydrazino]-5-phenyl-thiophene-2-carboxylic acid;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-1-OXY-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-1-OXY-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3-[(2-AMINO-CYCLOHEXYL)-(2,4-DICHLORO-BENZOYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-METHYL-CYCLOHEXANECARBONYL) - (1-OXO-HEXAHYDRO-THIOPYRAN-4-YL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (4-FLUOROPHENYL) - ((4-METHYL-CYCLOHEXANECARBONYL) -1-(METHYL-PIPERIDIN-3-YLMETHYL) -AMINO) -THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1-METHANESULFONYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1-METHYLCARBAMOYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [N-(2,4-Dichloro-benzoyl)-N',N'-dimethyl-hydrazino]-5-phenyl-thiophene-2-carboxylic acid;

or pharmaceutically acceptable salts thereof,

and at least one pharmaceutically acceptable carrier or excipient.

~~A pharmaceutical composition comprising at least one compound chosen from: 5-(4-FLUORO-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;~~

~~3-[(1-METHYLCARBAMOYL-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~

~~3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-2-OXO-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~

~~3-[(4-CARBOXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~

~~3-[(1-CYANO-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~

~~3-[(4-CARBOXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~
~~5-(3,4-DIFLUORO-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;~~
~~5-ACETYL-4-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-[2,2'-BITHIOPHENYL]-5-CARBOXYLIC ACID;~~
~~3-[(1-CARBAMOYL-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~
~~3-[(4-METHYL-CYCLOHEXANECARBONYL)-(7-OXO-AZEPAN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~
~~3-[(1-AMINOOXALYL-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~
~~3-[ETHYL-(4-METHYL-BENZOYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~
~~5-(4-ACETYL-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;~~
~~3-[(4-HYDROXY-4-METHYL-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~
~~3-[(3-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~
~~3-[(4-HYDROXY-4-METHYL-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~
~~3-[(3-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~
~~3-[(3-HYDROXY-CYCLOPENTYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;~~

~~or pharmaceutically acceptable salts thereof,
and at least one pharmaceutically acceptable carrier or
excipient.~~

49. (new) A pharmaceutical composition comprising at least one compound chosen from: 5-(4-FLUORO-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;
3-[(1-METHYLCARBAMOYL-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3-[(4-METHYL-CYCLOHEXANECARBONYL)-(1-METHYL-2-OXO-PIPERIDIN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3-[(4-CARBOXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3-[(1-CYANO-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3-[(4-CARBOXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
5-(3,4-DIFLUORO-PHENYL)-3-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-THIOPHENE-2-CARBOXYLIC ACID;
5'-ACETYL-4-[(4-HYDROXY-CYCLOHEXYL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-[2,2']BITHIOPHENYL-5-CARBOXYLIC ACID;
3-[(1-CARBAMOYL-PIPERIDIN-4-YL)-(4-METHYL-CYCLOHEXANECARBONYL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;
3-[(4-METHYL-CYCLOHEXANECARBONYL)-(7-OXO-AZEPAN-4-YL)-AMINO]-5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(1-AMINOOXALYL-PIPERIDIN-4-YL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [ETHYL- (4-METHYL-BENZOYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

5 - (4-ACETYL-PHENYL) -3 - [(4-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-HYDROXY-4-METHYL-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(3-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(4-HYDROXY-4-METHYL-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(3-HYDROXY-CYCLOHEXYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHENE-2-CARBOXYLIC ACID;

3 - [(3-HYDROXY-CYCLOPENTYL) - (4-METHYL-CYCLOHEXANECARBONYL) -AMINO] -5-PHENYL-THIOPHE-2-CARBOXYLIC ACID;

or pharmaceutically acceptable salts thereof,

and at least one pharmaceutically acceptable carrier or excipient.